

Title (en)

A DEVICE FOR DETERMINING DEPTH OF ANAESTHESIA

Publication

EP 0232234 A3 19890322 (EN)

Application

EP 87850015 A 19870121

Priority

SE 8600289 A 19860123

Abstract (en)

[origin: EP0232234A2] A device for determining the depth of anaesthesia of a patient, includes means (1) for measuring on a body part (2) an optical parameter, such as transmission or reflection, which is influenced by the circulation of the blood through this part of the patient's body, and to produce an electric signal which varies in accordance therewith. This signal is related to the heart frequency of the patient and shows a maximum amplitudes and minimum amplitudes which are related respectively to the systolic and diastolic blood-pressure of the patient. The signal is applied to signal processing circuits (3) which determine the variation of the period of the signal ($\Delta(R-R)$) and the variation of the pressure values, e.g. maximum amplitude (ΔP_{max}) or minimum amplitude (ΔP_{min}) or the difference between its maximum and minimum amplitudes ($\Delta(P_{\text{max}} - P_{\text{min}})$). A magnitude (K) which is proportional to the variation of the period of the signal or is preferably proportional to the ratio between the variation of the period of the signal and the variation of the pressure values is presented as a measurement of the depth to which the patient has been anaesthetized.

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Citation (search report)

- [X] US 3946725 A 19760330 - BOLSHOV VLADIMIR MIKHAILOVICH, et al
- [A] DE 2430788 B1 19751002
- [A] INTERNATIONAL CONFERENCE ON BIOMEDICAL TRANSDUCERS (BIOCAPT), Paris, 3rd-7th November 1975, part II, pages 253-258, Paris, FR; H. REICHENBERGER et al.: "Un nouveau système opto-électronique pour le monitoring de la circulation périphérique"

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